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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/556,456	11/10/2005	Takahiro Kitahara	Q90822	1306
23373 7590 12/27/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER ZACHARIA, RAMSEY E	
			ART UNIT 1794	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/556,456

Applicant(s)

KITAHARA ET AL.

Examiner

Ramsey Zacharia

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/02/07; 1/27/06; 11/10/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The nine foreign patent documents lined through in the IDS filed 27 January 2007 were lined through because they are duplicates of references considered and initialed in the IDS filed 10 November 2005.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Laminate for Fuel Tube

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The phrase "comprising chlorotrifluoroethylene, ethylene and/or a fluorine-containing monomer" renders claim 5 indefinite because it is unclear if the copolymer is required to comprise chlorotrifluoroethylene and at least one of ethylene and a fluorine-containing monomer or merely at least one of chlorotrifluoroethylene, ethylene, and a fluorine-containing monomer.

Claim Language

7. For the purpose of examination, the copolymer of claim 5 is taken to comprise chlorotrifluoroethylene as well as one or both of ethylene and a fluorine-containing monomer.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukushi et al. (US 2003/0198770).

Fukushi et al. teach an article that may be used as a hose for conveying fuels (paragraph 0001). The article comprises a layer of a perhalogenated polymer (paragraph 0004). Additional layers comprising polymers, such as polyamides and polyolefins, may be used (paragraph 0037-0041). The perhalogenated polymer may comprise at least 95% of interpolymerized units, such

as tetrafluoroethylene and chlorotrifluoroethylene, and further include other perfluorinated monomers (paragraph 0015). A polymer comprising 95% TFE and CTFE would be expected to have a fuel permeation coefficient that meets the limitations of claims 2 and 3 since such a polymer reads on the material described in the instant specification (see page 10, lines 5-13). Alternatively, the embodiment of the Examples illustrate perhalogenated polymers that are all copolymer of TFE with HFP and/or PPVE, wherein the relative amounts of comonomers are all within the ranges cited in the instant specification (see page 7, line 16-32). As such, these copolymers would all be expected to inherently possess a fuel permeation coefficient that meets the limitations of claims 2 and 3. Moreover, because the thickness of the perhalogenated layer (0.5 mm in the Examples) is within the range cited in the instant specification (see page 23, lines 23-27), the resulting fuel hose would be expected to have a fuel permeation rate that meets the limitation of claim 1.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as obvious over Fukushi et al. (US 2003/0198770).

Fukushi et al. teach all the limitations of claims 5 and 6, as outlined above, except for illustrating a specific embodiment wherein a copolymer of CTFE, TFE (i.e. a fluorine-containing

monomer), and a comonomer is used as the perhalogenated polymer. However, Fukushi et al. do teach that the perhalogenated polymer may comprise 95% of interpolymerized units such as TFE and CTFE in addition to other perfluorinated monomers (see paragraph 0015).

In the event that one skilled in the art would not readily envisage a perhalogenated polymer comprising 95% of a combination of CTFE and TFE in addition to other perfluorinated monomers, it would have been obvious to one skilled in the art to use both CTFE and TFE in the perhalogenated polymer since it has been held that it is *prima facie* obvious to combine two compositions (e.g. CTFE and TFE) each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. See MPEP 2144.06.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (571) 272-1518. The examiner can normally be reached on Monday through Friday from 9 to 5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached at (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ramsey Zacharia
Primary Examiner
Tech Center 1700